

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method in a wireless transmit receive unit (WTRU) for predicting a future quality of a communication channel comprising:
receiving a downlink data communication;
performing at least one current quality measurement on the downlink data communication to determine the current quality of the downlink data channel;
deriving, based on the current quality, a predictive channel quality indication (CQI) estimating the future quality of the downlink data channel on a per time slot basis; and
transmitting the predictive CQI to a Node B, wherein the predictive CQI includes at least one of a recommended transport block size, modulation format, or number of codes.
2. (Previously Presented) The method of claim 1, further including storing the at least one current quality measurement.

3. (Previously Presented) The method of claim 2, wherein deriving the predictive CQI includes retrieving at least one stored quality measurement and utilizing the at least one stored quality measurement and the at least one current quality measurement.

4. (Previously Presented) The method of claim 1, further including storing the predictive CQI.

5. (Previously Presented) The method of claim 1, wherein deriving the predictive CQI utilizes a linear predictive algorithm.

6 – 11. (Canceled.)

12. (Currently Amended) A method in a wireless transmit receive unit (WTRU) for providing predictive channel quality measurements of a downlink communication channel comprising:

monitoring said downlink communication channel;

performing at least one current quality measurement on the downlink data communication channel to determine the current quality of the downlink data channel;

deriving, based on the performing at least one current quality measurement (CQI), a prediction of the future quality of the downlink data communication channel on a per time slot basis; and

transmitting the prediction to a Node B, wherein the prediction represents at least one of a recommended transport block size, modulation format, or number of codes.

13. (Previously Presented) The method of claim 12, further including storing the at least one current quality measurement.

14. (Previously Presented) The method of claim 13, wherein deriving the prediction further includes retrieving at least one stored quality measurement and utilizing the at least one stored quality measurement and the at least one current quality measurement.

15. (Previously Presented) The method of claim 12, further including storing the prediction.

16. (Previously Presented) The method of claim 12, wherein the deriving a prediction utilizes a linear predictive algorithm.

17 – 31. (Canceled.)

32. (Currently Amended) A method in a wireless transmit receive unit (WTRU) for predicting a future quality of a communication channel comprising:

- receiving a downlink data communication;
- receiving a said pilot channel communication;
- performing at least one current quality measurement on the downlink data communication and the pilot channel communication to determine the current quality of the downlink data channel;
- deriving, based on the performing at least one current quality measurement, a predictive channel quality indication (CQI) estimates the future quality of the downlink data channel on a per time slot basis; and
- transmitting the predictive CQI to a Node B, wherein the predictive CQI includes at least one of a recommended transport block size, modulation format, or number of codes.

33. (Previously Presented) The method of claim 32, further including storing the at least one current quality measurement.

34. (Previously Presented) The method of claim 33, wherein the deriving a predictive CQI further includes retrieving at least one stored quality measurement and utilizing the at least one stored quality measurement and the at least one current quality measurement.

35. (Previously Presented) The method of claim 32, further including storing the predictive CQI.

36. (Previously Presented) The method of claim 32, wherein the deriving a predictive CQI utilizes a linear predictive algorithm.